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SNOWPLOW PREP PACKAGE (VYU)

The chart on the following page shows GMTG approved models available with snowplow prep package-option VYU.

General Motors recommends that when a snowplow is mounted on a vehicle, only one passenger should accompany the driver. More than one passenger may exceed Front Gross Axle Weight Ratings.

Prior to installing a front mounted snowplow, the following process should be followed and necessary information obtained.

- Establish vehicle curb weight
- Establish chassis manufacturer's front and rear axle weight ratings
- Chevrolet and GMC truck dealers can provide availability, specifications, Gross Vehicle Weight Ratings (GVWR), and Front and Rear Gross Axle Weight Ratings (FGAWR/RGAWR). For vehicles already built, this information can be found on the certification label installed on driver's door/door frame or provided on the cover of the Incomplete Vehicle Document.

The following information should be obtained and provided by the manufacturers of snowplows and salt spreaders:

- Specifications, weights and center of gravity data
- Vehicle installation guidelines and instructions
- Calculation of weight distribution for the front and rear axles

The loaded vehicle with driver, passenger, aftermarket accessories, snowplows, spreader, and cargo must not exceed the Gross Vehicle Weight Rating (GVWR), and Front and Rear Gross Axle Weight Ratings. In addition, the completed curb weight vehicle, with all installed aftermarket accessories, snowplow, and spreader, and with 400 lbs. for vehicles less than 10,000 lbs. and 500 lbs. for vehicles greater than 10,000 lbs. distributed in the driver-passenger area of the vehicle, must have a center of gravity location that is located within the trapezoid formed by the coordinates A, B, C, D, H1 & H2, plus it must be to the rear of vertical line E and forward of vertical line F as defined in the ALLOWABLE CENTER OF GRAVITY CHARTS. If the center of gravity location does not fall within the specified trapezoid, ballast weight may be required to shift the center of gravity location until it falls within the specified trapezoid.

The snowplow manufacturer and the installer of the aftermarket equipment should determine the amount of rear ballast required to ensure that the vehicle, with the attached snowplow and aftermarket equipment, complies with the Allowable Center of Gravity Trapezoid and the resulting front and rear weight distribution ratio as defined in the Allowable Center of Gravity Charts published in this manual.

(Snowplow Prep Package — continued on next page)

SNOWPLOW — ONLY ON THE C/K, UTILITY AND CAB CHASSIS

(Snowplow Prep Package — continued from previous page)

Ballast Compensating Weight

The use of rear ballast weight may be required to prevent exceeding the Gross Axle Weight Rating of the front axle. The use of rear ballast weight may be required to ensure that the center of gravity location of the completed vehicle, with the attached snowplow and other installed equipment, complies with the Allowable Center of Gravity Trapezoid and the resulting front and rear weight distribution ratio, even though the actual front weight may be less than the Gross Axle Weight Rating of the front axle. In either case, the rear ballast weight should be securely attached in the cargo box or behind the rear axle of the vehicle in a manner which prevents it from moving during driving and stopping.

⚠ CAUTION

TORSION BAR ADJUSTMENT

To help avoid personal injury, refer to Z-height setting procedure before adjusting torsion bars. If torsion bars are adjusted for aftermarket equipment, be sure to return them to specification when the equipment is removed. Otherwise, a front shock absorber may dislodge and damage a front brake line. This could result in an accident when minimum stopping distances are required.

Chevrolet/GMC Snowplow Prep Package – Option VYU, Pickup – K15703-K25943

Model		K15703	K15903	K25753 HD	K25743	K25903	K25943
Cab		Regular	Regular	Extended	Crew	Regular	Crew
Wheelbase Inches		119	133	143.5	153	133	167
P.U. Box Length feet		6.5	8	6.5	6.5	8	8
GVWR lb. (option code)		6100(C5M)	6400(C7H)	9200(C6W)	9200(C6W)	9200(C6W)	9200(C6W)
GAWR lb. — Frt.		3925	3925	4800	4800	4800	4800
Engine Availability with VYU:	**Opt. Code**						
Vortec 8.1L Gasoline V8 Engine	L18	N/A	N/A	A	N/A	A	N/A
Duramax 6.6L Diesel V8 Engine	LLY	N/A	N/A	A	N/A	A	N/A
Vortec 4800 V8 Gasoline	LR4	A	A	N/A	N/A	N/A	N/A
Vortec 5300 V8 Gasoline	LM7	A	A	N/A	N/A	N/A	N/A
Vortec 6000 V8 Gasoline	LQ4	N/A	N/A	A	B	B	B
Base (B) Equipment Includes:							
Battery 600 CCA (*)	—	B	B	B	B	B	B
Generator 160 amp.	KW1	B	B	N/A	N/A	N/A	N/A
Provisions for Rear Back-Up Lighting	—	B	B	B	B	B	B
Front Tow Hooks	V76	B	B	B	B	B	B
Snowplow Prep Pkg. Includes:	VYU						
Upgrade Front Torsion Bar	F60	X	X	X	X	X	X
External Engine Oil Cooler LQ4 only	KC4	N/A	N/A	R	R	R	R
Generator 145-Amps	KG3	N/A	N/A	X	X	X	X
Provision for Roof Mntd. Emergency Light	TRW	X	X	X	X	X	X
Transmission Cooler (air to oil) Auto only	KNP	X	X	X	X	X	X
42mm Hole FOD with Rubber Grommet	—	X	X	X	X	X	X

(*) Trucks with LLY (Diesel Engine) come with dual 770 CCA batteries (TQ3) as base equipment B – base vehicle / A – available / X – included in package / Y – included where applicable / N/A – not available on this model / R – required on this mode

SNOWPLOW — ONLY ON THE C/K, UTILITY AND CAB CHASSIS

(continued on next page)

Chevrolet/GMC Snowplow Prep Package – Option VYU, Pickup – K15703-K25943 (continued)

Model		K15703	K15903	K25753 HD	K25743	K25903	K25943
Cab		Regular	Regular	Extended	Crew	Regular	Crew
Wheelbase Inches		119	133	143.5	153	133	167
P.U. Box Length feet		6.5	8	6.5	6.5	8	8
GVWR lb. (option code)		6100(C5M)	6400(C7H)	9200(C6W)	9200(C6W)	9200(C6W)	9200(C6W)
GAWR lb. — Frt.		3925	3925	4800	4800	4800	4800
Snowplow Prep Pkg. Includes: (cont.)	VYU						
Fwd. Lamp Harness w/In-Line Connector	—	X	X	X	X	X	X
Skid Plate “Off Road”	NZZ	X	X	X	X	X	X
P265/70R17 ALS BW	—	B	B	N/A	N/A	N/A	N/A
P265/70R17 ALS WOL	—	A	A	N/A	N/A	N/A	N/A
LT 245/75R16E ALS/OOR TIRES (60 PSI)	—	N/A	N/A	R	R	R	R
Suggested Optional Equipment:							
Locking Differential, Rear Axle	G80	A	A	A	A	A	A
Battery 770 CCA (*)	7Y9	A	A	A	A	A	A
Batteries – 770 CCA & 600 CCA (*)	8B0	A	A	A	A	A	A
Back-up Alarm – Gas Engine Only	8S3	A	A	A	A	A	A
Engine Block Heater	K05	A	A	A	A	A	A
Replacement Floor Covering HD Rubber	BG9	A	A	A	A	A	A
Rear Window Defogger	C49	A	A	A	A	A	A

(*) Trucks with LLY (Diesel Engine) come with dual 770 CCA batteries (TQ3) as base equipment B – base vehicle / A – available / X – included in package / Y – included where applicable / N/A – not available on this model / R – required on this model

SNOWPLOW — ONLY ON THE C/K, UTILITY AND CAB CHASSIS

Chevrolet/GMC Snowplow Prep Package – Option VYU, Pickup – K25953-K35943

Model		K25953	K35903	K35953	K35943	K35903	K35953	K35943
Cab		Extended	Regular	Extended	Crew	Regular	Extended	Crew
Wheelbase Inches		157.5	133.0	157.5	167.0	133.0	157.5	167.0
P.U. Box Length feet		8	8	8	8	8	8	8
GVWR lb. (option code)		9200(C6W)	9900(C4M)	9900(C4M)	9900(C4M)	11400(C7W)	11400(C7W)	11400(C7W)
GAWR lb. — Frt.		4800	4800	4800	4800	4800	4800	4800
Engine Availability with VYU:	**Opt. Code**							
Vortec 8.1L Gasoline V8 Engine	L18	A	A	N/A	N/A	A	A	N/A
Duramax 6.6L Diesel V8 Engine	LLY	N/A	N/A	N/A	N/A	A	N/A	N/A
Vortec 6000 V8 Gasoline	LQ4	B	B	B	B	B	B	B
Base (B) Equipment Includes:								
Battery 600 CCA (*)	—	B	B	B	B	B	B	B
Provisions for Rear Back-Up Lighting	—	B	B	B	B	B	B	B
Front Tow Hooks	V76	B	B	B	B	B	B	B
Snowplow Prep Pkg. Includes:	VYU							
Upgrade Front Torsion Bar	F60	X	X	X	X	X	X	X
External Engine Oil Cooler LQ4 only	KC4	R	R	R	R	R	R	R
Generator 145-Amps	KG3	X	X	X	X	X	X	X
Provision for Roof Mntd. Emergency Light	TRW	X	X	X	X	X	X	X
Transmission Cooler (air to oil) Auto only	KNP	X	X	X	X	X	X	X
42mm Hole FOD with Rubber Grommet	—	X	X	X	X	X	X	X
Fwd. Lamp Harness w/In-Line Connector	—	X	X	X	X	X	X	X

(*) Trucks with LLY (Diesel Engine) come with dual 770 CCA batteries (TQ3) as base equipment B – base vehicle / A – available / X – included in package / Y – included where applicable / N/A – not available on this model / R – required on this mode

SNOWPLOW — ONLY ON THE C/K, UTILITY AND CAB CHASSIS

(continued on next page)

Chevrolet/GMC Snowplow Prep Package – Option VYU, Pickup – K25953-K35943 (continued)

Model		K25953	K35903	K35953	K35943	K35903	K35953	K35943
Cab		Extended	Regular	Extended	Crew	Regular	Extended	Crew
Wheelbase Inches		157.5	133.0	157.5	167.0	133.0	157.5	167.0
P.U. Box Length feet		8	8	8	8	8	8	8
GVWR lb. (option code)		9200(C6W)	9900(C4M)	9900(C4M)	9900(C4M)	11400(C7W)	11400(C7W)	11400(C7W)
GAWR lb. — Frt.		4800	4800	4800	4800	4800	4800	4800
Snowplow Prep Pkg. Includes: (cont.)	VYU							
Skid Plate “Off Road”	NZZ	X	X	X	X	X	X	X
LT 245/75R16E ALS/OOR TIRES (60 PSI)	—	R	N/A	N/A	N/A	N/A	N/A	N/A
LT 265/75R16E	—	N/A	R	R	R	N/A	N/A	N/A
LT 215/85R16E ALS/OOR TIRES (70 PSI)	—	N/A	R	R	R	R	R	R
Suggested Optional Equipment:								
Locking Differential, Rear Axle	G80	A	—	—	—	A	A	A
Battery 770 CCA (*)	7Y9	A	A	A	A	A	A	A
Batteries – 770 CCA & 600 CCA (*)	8B0	A	A	A	N/A	A	A	N/A
Back-up Alarm – Gas Engine Only	8S3	A	A	A	A	A	A	A
Engine Block Heater	K05	A	A	A	A	A	A	A
Replacement Floor Covering HD Rubber	BG9	A	A	A	A	A	A	A
Rear Window Defogger	C49	A	A	A	A	A	A	A

(*) Trucks with LLY (Diesel Engine) come with dual 770 CCA batteries (TQ3) as base equipment B – base vehicle / A – available / X – included in package / Y – included where applicable / N/A – not available on this model / R – required on this model

SNOWPLOW — ONLY ON THE C/K, UTILITY AND CAB CHASSIS

Chevrolet/GMC Snowplow Prep Package – Option VYU, Cab Chassis/Utility

		Cab Chassis			Utility	
Model		K36003	K36053	K36403	K25906	K25936
Cab		Regular	Extended	Regular	—	—
Wheelbase Inches		137.0	161.5	161.5	130.0	130.0
GVWR lb. (option code)		12000 (C7L)	12000 (C7L)	12000 (C7L)	8600 (C6P)	8600 (C6P)
GAWR lb. — Frt.		4800	4800	4800	4180	4380
Engine Availability with VYU:	**Opt. Code**					
Vortec 8.1L Gasoline V8 Engine	L18	A	A	A	N/A	A
Duramax 6.6L Diesel V8 Engine	LLY	A	N/A	N/A	N/A	N/A
Vortec 6000 V8 Gasoline	LQ4	B	B	B	B	N/A
Base (B) Equipment Includes:						
Battery 600 CCA (*)	—	B	B	B	B	B
Provisions for Rear Back-Up Lighting	—	B	B	B	B	B
Tow Hooks	V76	B	B	B	B	B
Snowplow Prep Pkg. Includes:	VYU*					
Upgrade of front torsion bar	F60	X	X	X	X	X
External Eng. Oil Cooler LQ4 only	KC4	R	R	R	R	R
Generator 145-Amps	KG3	X	X	X	B	X
Provision for Roof Mntd. Emergency Light	TRW	X	X	X	X	X
Transmission Cooler (air to oil) Auto only	KNP	X	X	X	X	X
42mm Hole FOD with Rubber Grommet	—	X	X	X	X	X
Fwd Lamp Harness with In-Line Connector	—	X	X	X	X	X
Skid Plate “Off Road”	NZZ	X	X	X	A	X

(*) Trucks with LLY (Diesel Engine) come with dual 600 CCA batteries as base equipment B – base vehicle / A – available / X – included in package / Y – included where applicable / N/A – not available on this model

* Options CF5, WX9, 5G4, Z55, and Exp. Are excluded on the K25906 when VYU is ordered

SNOWPLOW — ONLY ON THE C/K, UTILITY AND CAB CHASSIS

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Chevrolet/GMC Snowplow Prep Package – Option VYU, Cab Chassis/Utility (cont.)

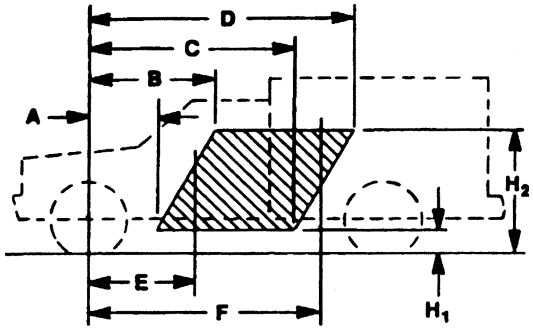
		Cab Chassis			Utility	
Model		K36003	K36053	K36403	K25906	K25936
Cab		Regular	Extended	Regular	—	—
Wheelbase Inches		137.0	161.5	161.5	130.0	130.0
GVWR lb. (option code)		12000 (C7L)	12000 (C7L)	12000 (C7L)	8600 (C6P)	8600 (C6P)
GAWR lb. — Frt.		4800	4800	4800	4180	4380
Snowplow Prep Pkg. Includes: (cont.)	VYU*					
LT 245/75R16E ALS/OOR	—	X	X	X	B	B
P265/70R16E	—	N/A	N/A	N/A	N/A	B
LT 215/85R16E ALS/OOR TIRES (70 PSI)	—	R	B	B	N/A	N/A
Suggested Optional Equipment:						
Battery 770 CCA (*)	7Y9	A	A	A	A	N/A
Locking Differential, Rear Axle	G80	A	A	A	A	A
Batteries – 770 CCA & 600 CCA (*)	8B0	A	A	A	A	N/A
Back-up Alarm – Gas Engine Only	8S3	A	A	A	N/A	N/A
Engine Block Heater	K05	A	A	A	A	A
Replacement Floor Covering HD Rubber	BG9	A	A	A	A	N/A
Rear Window Defogger	C49	A	A	A	A	A

(*) Trucks with LLY (Diesel Engine) come with dual 600 CCA batteries as base equipment B – base vehicle / A – available / X – included in package / Y – included where applicable / N/A – not available on this model

* Options CF5, WX9, 5G4, Z55, and Exp. Are excluded on the K25906 when VYU is ordered

SNOWPLOW — ONLY ON THE C/K, UTILITY AND CAB CHASSIS

CMVSS105 and FMVSS105 Allowable Center of Gravity Calculation



C/G of vehicle in CMVSS or FMVSS unladen condition [Curb + 181.4 kg. (400 lb) or Curb + 226.8 kg. (500 lb) as defined by CMVSS 105 and FMVSS 105] must be inside shaded area – that is, the C/G must be within the trapezoid formed by the coordinates A, B, C, D, H_1, & H_2, plus the C/G must be to the rear of vertical line E and forward of vertical line F.

The center of gravity of the total vehicle falls within the areas referenced on the "ALLOWABLE CENTER OF GRAVITY CHART" that follows. Instructions for determining the allowable center of gravity variation are listed below:

These charts detail the envelope of allowable center of gravity variation for completed vehicles. This is significant for the lightly loaded portion of FMVSS 105, which is defined as curb plus 181.4 kg (400 lb) distributed in the driver-passenger area of the vehicle for vehicles with GVWR of 4536 kg (10,000 lb) or less or as curb plus 226.8 kg (500 lb) distributed in the driver-passenger area of the vehicle for vehicles with GVWR greater than 4536 kg (10,000 lb).

The lightly loaded center of gravity complete vehicles needs to be restricted so it will meet FMVSS 105 stopping distances. The laden center of gravity does not need to be specified as it is controlled within the CMVSS 105 and FMVSS 105 test procedure by specific instructions as to how ballast is to be placed (while height is not controlled, it is assumed that for test purposes it would be reasonable).

For Body Builder's use, the center of gravity location can be approximated by the following formula:

$$d = \frac{[W_{rc} + W_{rb} + [(H_p)(W_p)/WB]]\ WB}{W_t}$$

$$h = \frac{[h_1 W_c + h_2 W_b + (h_3)(W_p)]}{W_t}$$

d = horizontal distance from front wheels to completed vehicle center of gravity cm (in)

SNOWPLOW — ONLY ON THE C/K, UTILITY AND CAB CHASSIS

(continued on next page)

CMVSS 105 and FMVSS 105 Allowable Center of Gravity Calculation (continued)

h	=	vertical distance from ground to completed vehicle center of gravity cm (in)
W_{rc}	=	rear component of bare chassis weight kg (lb)
W_{rb}	=	rear component of body weight kg (lb)
WB	=	vehicle wheelbase cm (in)
W_t	=	total weight of chassis and body kg (lbs) plus 181.4 kg (400 lb) for vehicles with GVWR of 4536 kg (10,000 lb) or less
W_t	=	total weight of chassis and body kg (lbs) plus 226.8 kg (500 lb) for vehicles with GVWR greater than 4536 kg (10,000 lb)
h_1	=	center of gravity height from ground of the bare chassis = 71.1 cm (28 in)
W_c	=	total weight of chassis kg (lb)
h_2	=	center of gravity height of body from ground cm (in)
W_b	=	total weight of body kg (lb)
W_p	=	181.4 kg (400 lb) amount from lightly loaded definition that is evenly distributed in driver-passenger area of vehicle for vehicles with GVWR of 4536 kg (10,000 lb) or less
W_p	=	226.8 kg (500 lb) amount from lightly loaded definition that is evenly distributed in driver-passenger area of vehicle for vehicles with GVWR greater than 4536 kg (10,000 lb)
H_p	=	146.7 cm (57.76 in) horizontal distance from front axle to center of gravity of 181.4 kg (400 lb) or 226.8 kb (500 lb) evenly distributed in driver-passenger area of vehicle
h_3	=	94.8 cm (37.32 in) vertical center of gravity height of 181.4 kg (400 lb) evenly distributed in driver-passenger area for vehicles with 3900 kg (8600 lb) GVWR
h_3	=	99.9 cm (39.33 in) vertical center of gravity height of 181.4 kg (400 lb) evenly distributed in driver-passenger area for vehicles with 3856, 4173 and 4491 kg (8500, 9200 and 9900 lb) GVWR
h_3	=	99.9 cm (39.33 in) vertical center of gravity height of 226.8 kg (500 lb) evenly distributed in driver-passenger area for vehicles with 5171 - 5443 kg (11,400 - 12,000 lb) GVWR

NOTE: An alternate method of center of gravity calculation may be found in the current issue of the General Motors Body Builders Book in the general instruction section and in SVIE Bulletin #39.

SNOWPLOW — ONLY ON THE C/K, UTILITY AND CAB CHASSIS

CMVSS105 and FMVSS105 Allowable Center of Gravity Charts

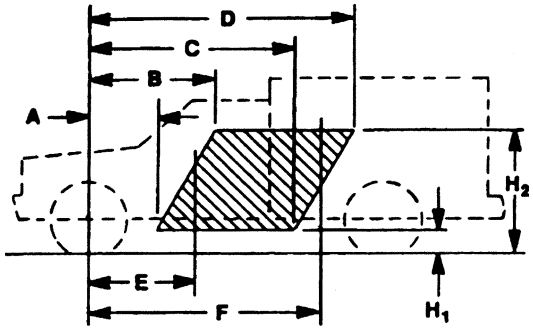
					Snowplow Prep Package Vehicles							
					Coordinates of Allowable C/G Variation at CMVSS/FMVSS Unladen Curb Wt. + 181.4 kg (400 lbs.) or 226.8 kg (500 lbs.) as defined by CMVSS & FMVSS 105						Forward C/G Limit	Rearward C/G Limit
Model	GVWR Kg (lb)	Brake System	Wheelbase cm (in)	Rear Wheel	H_1 cm (in)	H_2 cm (in)	A cm (in)	B cm (in)	C cm (in)	D cm (in)	E cm (in)	F cm (in)
K25906	3901 (8600)	JH6	330.2 (130)	SRW	30.5 (12)	121.9 (48)	129.5 (51)	198.1 (78)	205.7 (81)	264.2 (104)	129.5 (51)	259.1 (102)
K25936	3901 (8600)	JH6	330.2 (130)	SRW	30.5 (12)	121.9 (48)	129.5 (51)	198.1 (78)	205.7 (81)	264.2 (104)	129.5 (51)	259.1 (102)
K25903	4173 (9200)	JH6	337.82 (133)	SRW	30.5 (12)	121.9 (48)	91.4 (36)	160.0 (63)	205.7 (81)	269.23 (106)	127.0 (50)	269.23 (106)
K25753	4173 (9200)	JH6	364.49 (143.5)	SRW	30.5 (12)	121.9 (48)	96.5 (38)	165.1 (65)	218.4 (86)	284.5 (112)	137.2 (54)	284.5 (112)
K25743	4173 (9200)	JH6	388.62 (153)	SRW	30.5 (12)	121.9 (48)	101.6 (40)	170.2 (67)	231.1 (91)	297.2 (117)	144.8 (57)	297.2 (117)
K25953	4173 (9200)	JH6	400.05 (157.5)	SRW	30.5 (12)	121.9 (48)	104.1 (41)	172.7 (68)	238.8 (94)	304.8 (120)	147.3 (58)	304.8 (120)
K25943	4173 (9200)	JH6	424.18 (167)	SRW	30.5 (12)	121.9 (48)	109.2 (43)	177.8 (70)	251.5 (99)	317.5 (125)	157.5 (62)	317.5 (125)
K35903	4491 (9900)	JH6	337.82 (133)	SRW	30.5 (12)	121.9 (48)	109.2 (43)	167.6 (66)	162.6 (64)	221.0 (87)	157.5 (62)	221.0 (87)
K35953	4491 (9900)	JH6	400.05 (157.5)	SRW	30.5 (12)	121.9 (48)	127.0 (50)	185.4 (73)	182.9 (72)	243.8 (96)	137.2 (54)	243.8 (96)
K35943	4491 (9900)	JH6	424.18 (167)	SRW	30.5 (12)	121.9 (48)	132.1 (52)	190.5 (75)	193.0 (76)	254.0 (100)	144.8 (57)	254.0 (100)
K35903	5171 (11400)	JH7	337.82 (133)	DRW	30.5 (12)	121.9 (48)	111.8 (44)	157.5 (62)	256.5 (101)	276.9 (109)	111.8 (44)	276.9 (109)
K35953	5171 (11400)	JH7	400.05 (157.5)	DRW	30.5 (12)	121.9 (48)	129.5 (51)	175.3 (69)	302.3 (119)	324.9 (128)	129.5 (51)	324.9 (128)
K35943	5171 (11400)	JH7	424.18 (167)	DRW	30.5 (12)	121.9 (48)	137.2 (54)	182.9 (72)	319.8 (126)	342.9 (135)	137.2 (54)	342.9 (135)
K36003	5443 (12000)	JH7	348.0 (137)	DRW	30.5 (12)	121.9 (48)	116.8 (46)	160.0 (63)	264.2 (104)	284.5 (112)	116.8 (46)	284.5 (112)
K36053	5443 (12000)	JH7	410.2 (161.5)	DRW	30.5 (12)	121.9 (48)	134.6 (53)	177.8 (70)	309.9 (122)	332.5 (131)	134.6 (53)	332.5 (131)
K36403	5443 (12000)	JH7	410.2 (161.5)	DRW	30.5 (12)	121.9 (48)	134.6 (53)	177.8 (70)	309.9 (122)	332.5 (131)	134.6 (53)	332.5 (131)

SRW = Single Rear Wheel
DRW = Dual Rear Wheel
C/G = Center of Gravity

Brake Systems:
Vacuum Powered Boosters JF7
Hydraulic Powered Boosters JH6, JH7

SNOWPLOW — ONLY ON THE C/K, UTILITY AND CAB CHASSIS

CMVSS135 and FMVSS135 Allowable Center of Gravity Calculation



C/G of vehicle in CMVSS or FMVSS unladen condition [Curb + 181.4 kg. (400 lb)] must be inside shaded area – that is, the C/G must be within the trapezoid formed by the coordinates A, B, C, D, H_1, & H_2, plus the C/G must be to the rear of vertical line E and forward of vertical line F.

The center of gravity of the total vehicle falls within the areas referenced on the "ALLOWABLE CENTER OF GRAVITY CHART" that follows. Instructions for determining the allowable center of gravity variation are listed below:

These charts detail the envelope of allowable center of gravity variation for completed vehicles. This is significant for the lightly loaded portion of CMVSS 135 and FMVSS 135, which is defined as curb plus 181.4 kg (400 lb) distributed in the driver-passenger area of the vehicle.

The lightly loaded center of gravity complete vehicles needs to be restricted so it will meet CMVSS 135 and FMVSS 135 stopping distances. The laden center of gravity does not need to be specified as it is controlled within the CMVSS 135 and FMVSS 135 test procedure by specific instructions as to how ballast is to be placed (while height is not controlled, it is assumed that for test purposes it would be reasonable).

For Body Builder's use, the center of gravity location can be approximated by the following formula:

$$d = \frac{[W_{rc} + W_{rb} + [(H_p)(W_p)/WB]]\ WB}{W_t}$$

$$h = \frac{[h_1 W_c + h_2 W_b + (h_3)(W_p)]}{W_t}$$

d = horizontal distance from front wheels to completed vehicle center of gravity cm (in)
h = vertical distance from ground to completed vehicle center of gravity cm (in)
W_{rc} = rear component of bare chassis weight kg (lb)
W_{rb} = rear component of body weight kg (lb)

SNOWPLOW — ONLY ON THE C/K, UTILITY AND CAB CHASSIS

(continued on next page)

CMVSS135 and FMVSS135 Allowable Center of Gravity Calculation (continued)

WB	=	vehicle wheelbase cm (in)
W_t	=	total weight of chassis and body kg (lbs) plus 181.4 kg (400 lb)
h_1	=	center of gravity height from ground of the bare chassis = 71.1 cm (28 in)
W_c	=	total weight of chassis kg (lb)
h_2	=	center of gravity height of body from ground cm (in)
W_b	=	total weight of body kg (lb)
W_p	=	181.4 kg (400 lb) amount from lightly loaded definition that is evenly distributed in driver-passenger area of vehicle
H_p	=	146.7 cm (57.76 in) horizontal distance from front axle to center of gravity of 181.4 kg (400 lb) evenly distributed in driver-passenger area of vehicle
h_3	=	94.8 cm (37.72 in) vertical center of gravity height of 181.4 kg (400 lb) evenly distributed in driver-passenger area for vehicles with 3500 kg (7716 lb) GVWR or less

NOTE: An alternate method of center of gravity calculation may be found in the current issue of the General Motors Body Builders Book in the general instruction section and in SVIE Bulletin #39.

SNOWPLOW — ONLY ON THE C/K, UTILITY AND CAB CHASSIS

CMVSS135 and FMVSS135 Allowable Center of Gravity Charts

					Snowplow Prep Package Vehicles							
					Coordinates of Allowable C/G Variation at CMVSS/FMVSS Unladen Curb Wt. + 181.4 kg (400 lbs.) or 226.8 kg (500 lbs.) as defined by CMVSS & FMVSS 105						Forward C/G Limit	Rearward C/G Limit
Model	GVWR Kg (lb)	Brake System	Wheelbase cm (in)	Rear Wheel	H_1 cm (in)	H_2 cm (in)	A cm (in)	B cm (in)	C cm (in)	D cm (in)	E cm (in)	F cm (in)
K15703	2903 (6400)	JF7	302.26 (119)	SRW	30.5 (12)	121.9 (48)	104.1 (41)	144.8 (57)	134.6 (53)	203.2 (80)	104.1 (41)	203.2 (80)
K15903	2903 (6400)	JF7	337.82 (133)	SRW	30.5 (12)	121.9 (48)	114.3 (45)	152.4 (60)	152.4 (60)	221.0 (87)	114.3 (45)	221.0 (87)

SRW = Single Rear Wheel
DRW = Dual Rear Wheel
C/G = Center of Gravity

Brake Systems:
Vacuum Powered Boosters JF7
Hydraulic Powered Boosters JH6, JH7

SNOWPLOW — ONLY ON THE C/K, UTILITY AND CAB CHASSIS

Snowplow Prep Package (VYU) Electrical Provisions

Emergency Roof-Mounted Lamp Switch This provision includes a dash-mounted switch (see Figure 1), a relay, and wiring which is routed up along the Left Hand B pillar that terminates at the roof as coiled blunt cut wires (see Figure 2). There are two blunt cut 12-gauge (3.0 mm^2) wires, one is Brown (roof-mounted lamp power), it is controlled by the dash-mounted switch through the relay, the other is Black (ground). The Brown power wire is protected by the 30-Amp SEO 2 fuse which is located in the Underhood Electrical Center.

145-Amp Generator The 145-Amp generator – Option KG3, will be equipped on all Full Size K2500/3500 Series pickups, cab chassis and utilities with Snow Plow Prep Package – Option VYU, which is an upgrade from the standard 105-Amp generator.

160-Amp Generator The 160-Amp generator – Option KW1, will be equipped on all Full Size K1500 Series Pickups with Snow Plow Prep Package – Option VYU, which is an upgrade from the standard 145-Amp generator – Option KG3.

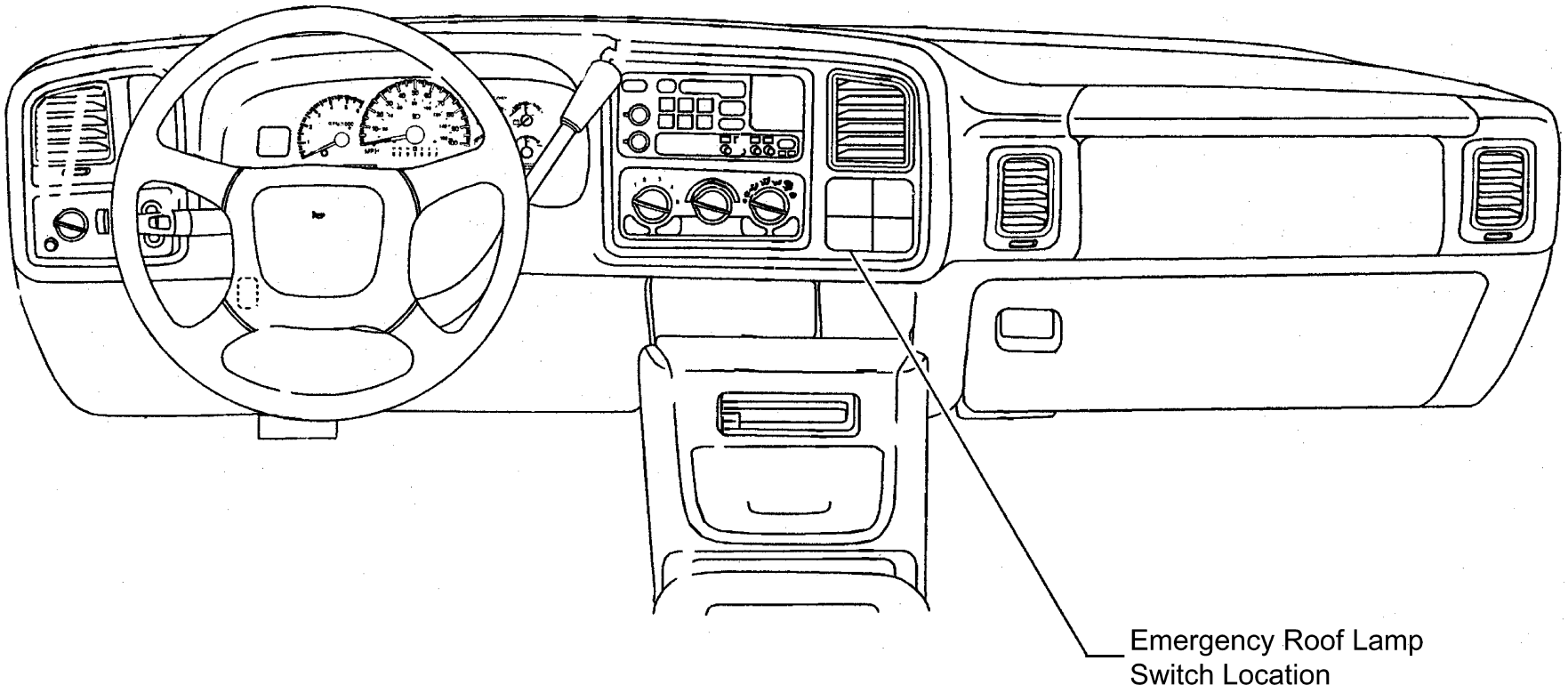
Accessory Harness Grommet Trucks will come equipped with a predrilled 42mm pass-through hole located on the dash panel on the left hand side of the vehicle. The hole will be sealed with a grommet (see Figure 3) which can be used by the upfitter for pass-through wiring. To use the grommet (part# 15336702), the upfitter slices off the tape tab end (in engine compartment) of the grommet and then spreads it open to pass wiring through.

Forward Lamp Harness In-Line Connector The forward lamp wiring harness will have a set of mating eight cavity connectors on both the left and right hand side of the vehicle (see Figures 4 & 5). The upfitter will be able to disconnect the in-line connectors which will allow interfacing with the forward lamp circuits (Front Parklamp, Turn Signal and DRL). The headlamp circuits must be accessed from the headlamp connectors. Circuit function charts of these connectors are on page 10. Connector face diagrams of the connectors are on pages 11 and 12. A parts list of these connectors is provided on page 13.

Backup Lamp Power Feed Although this feature is standard on the All New C/K pickup trucks, it should be pointed out that a backup lamp power feed is provided at the rear of the vehicle through the trailer wiring harness. This circuit is protected by the 10-Amp TRLR B/U fuse which is located in the Underhood Electrical Center. On vehicles with Light Duty Trailer Wiring (see Figure 6) which comes standard, this circuit can be accessed through the Light Green trailer wire. This wire is blunt cut and located at the rear of the vehicle along with other trailer tow circuits. On vehicles with Heavy Duty Trailer Wiring option (see Figure 7), this circuit is located in pin A of the trailer in-line connector at the rear of the vehicle.

SNOWPLOW — ONLY ON THE C/K, UTILITY AND CAB CHASSIS

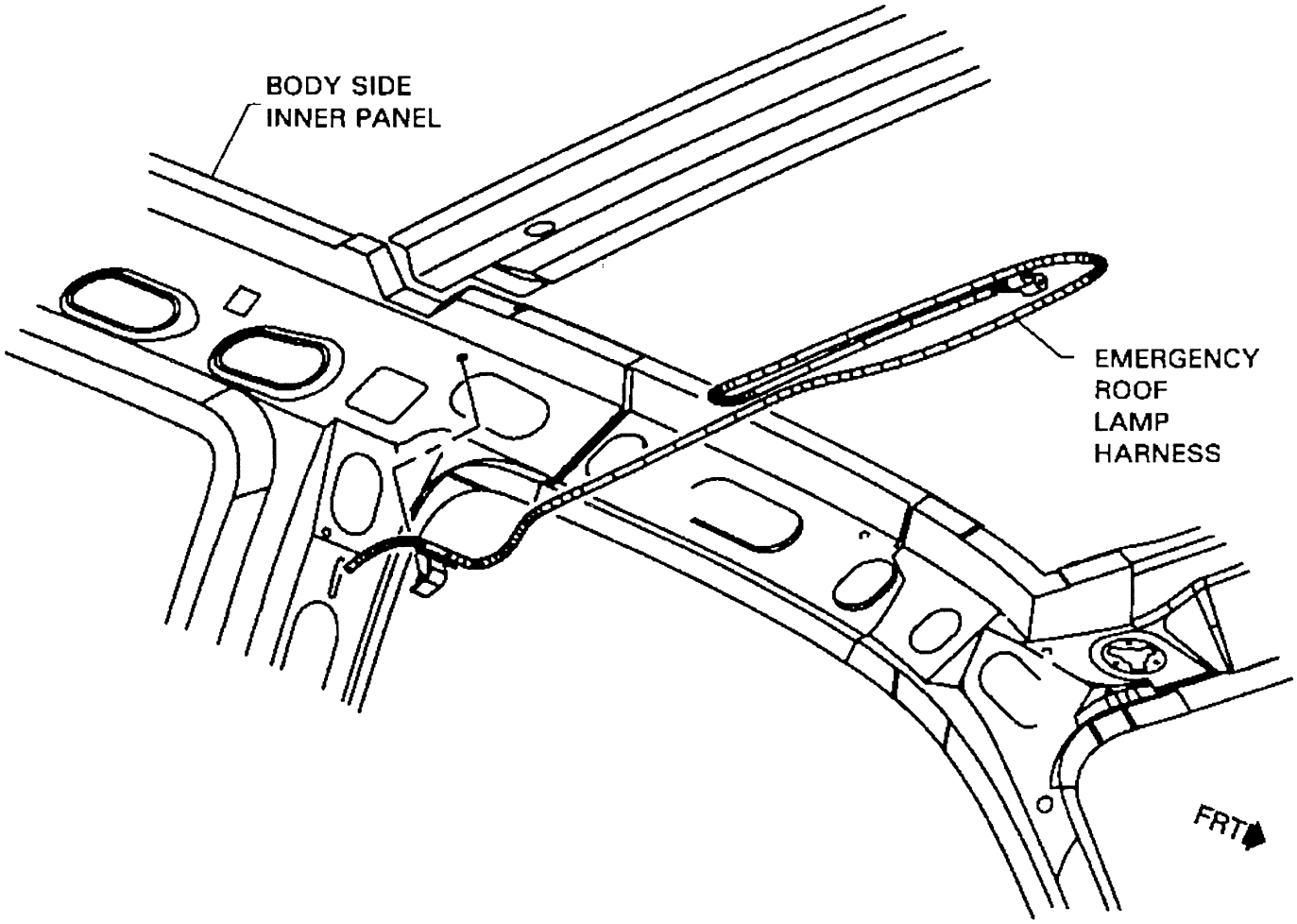
Figure 1



INSTRUMENT PANEL

SNOWPLOW — ONLY ON THE C/K, UTILITY AND CAB CHASSIS

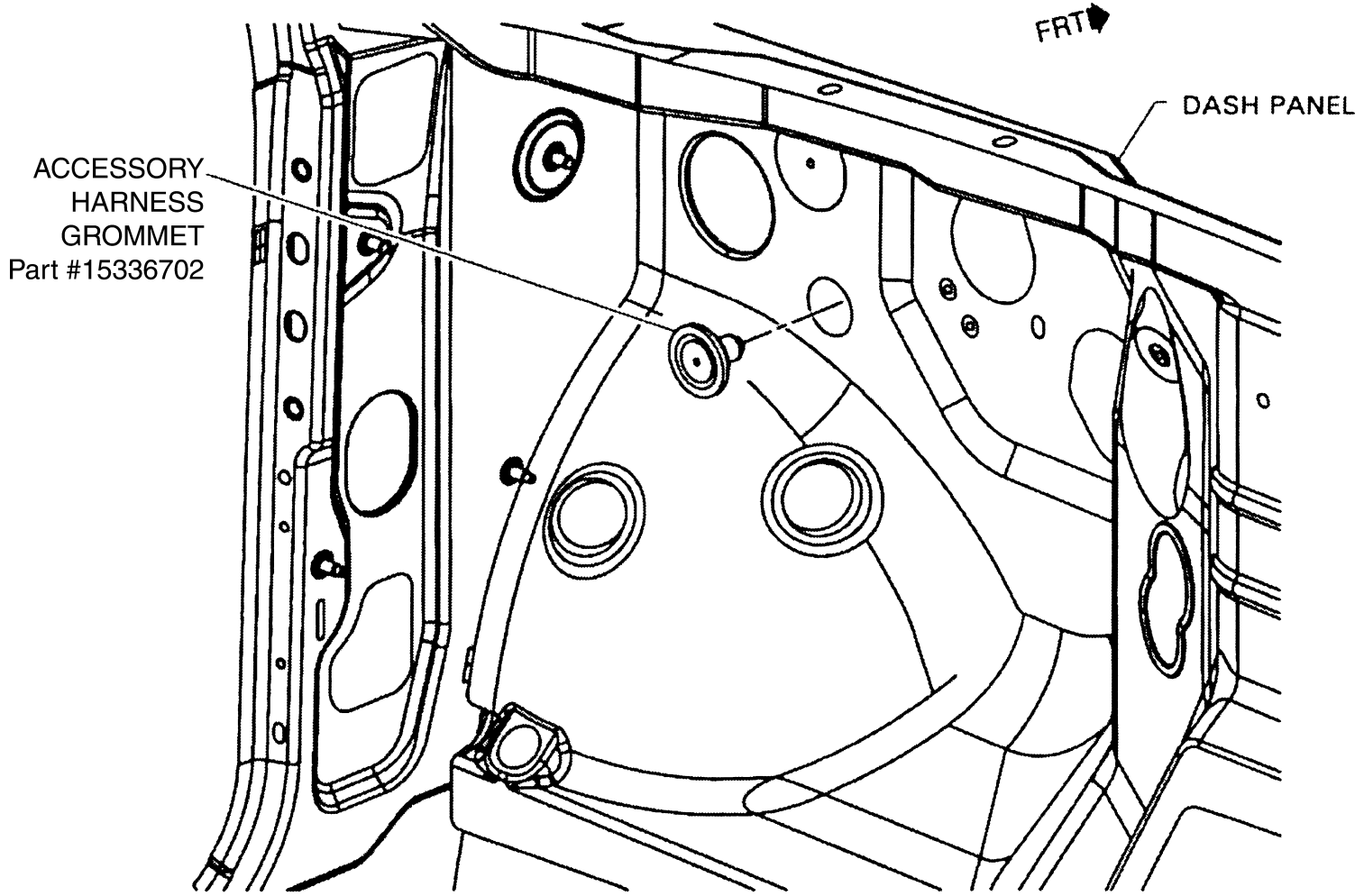
Figure 2



EMERGENCY VEHICLE ROOF LAMP HARNESS TO ROOF HEADER

SNOWPLOW — ONLY ON THE C/K, UTILITY AND CAB CHASSIS

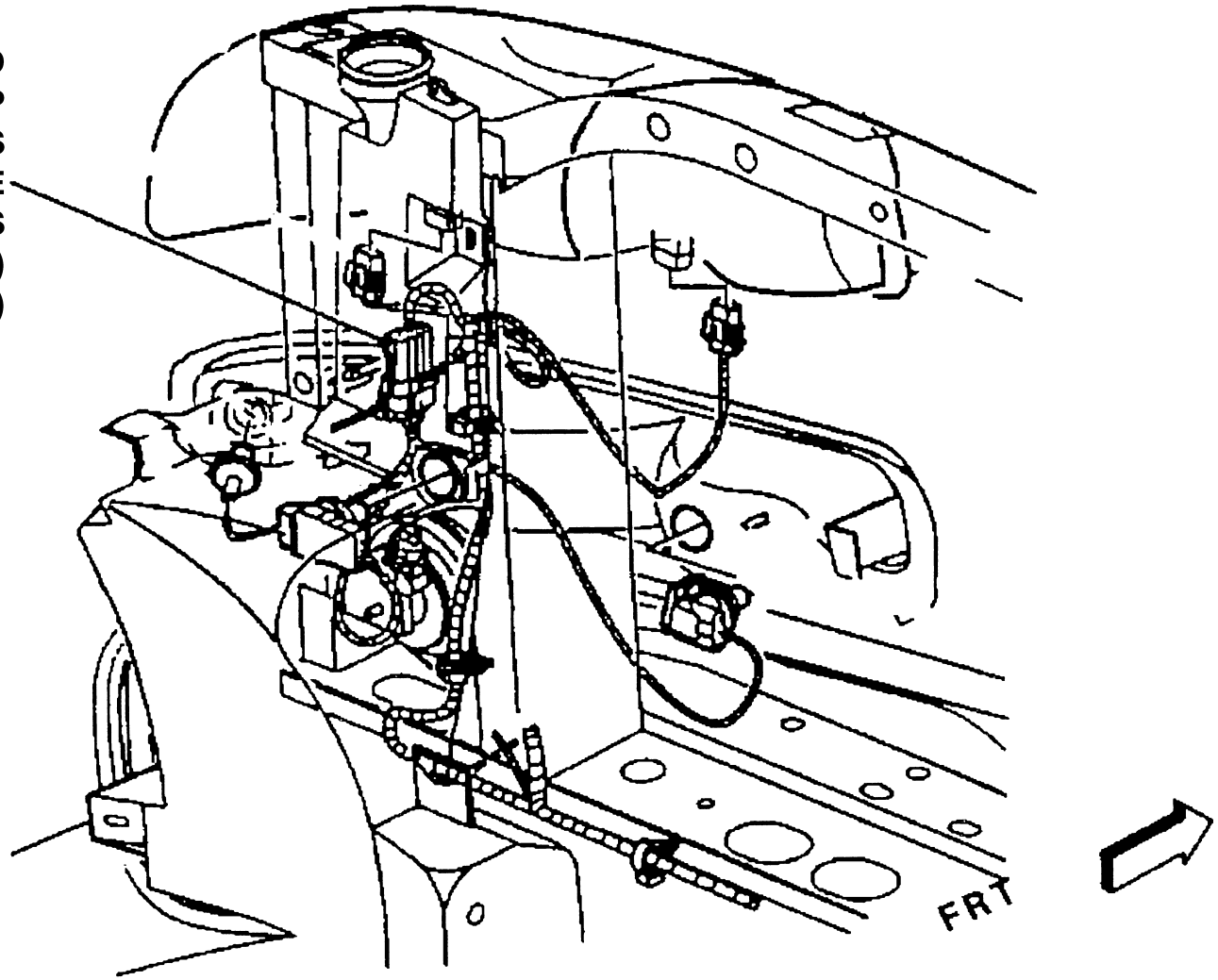
Figure 3



ACCESSORY HARNESS GROMMET

SNOWPLOW — ONLY ON THE C/K, UTILITY AND CAB CHASSIS

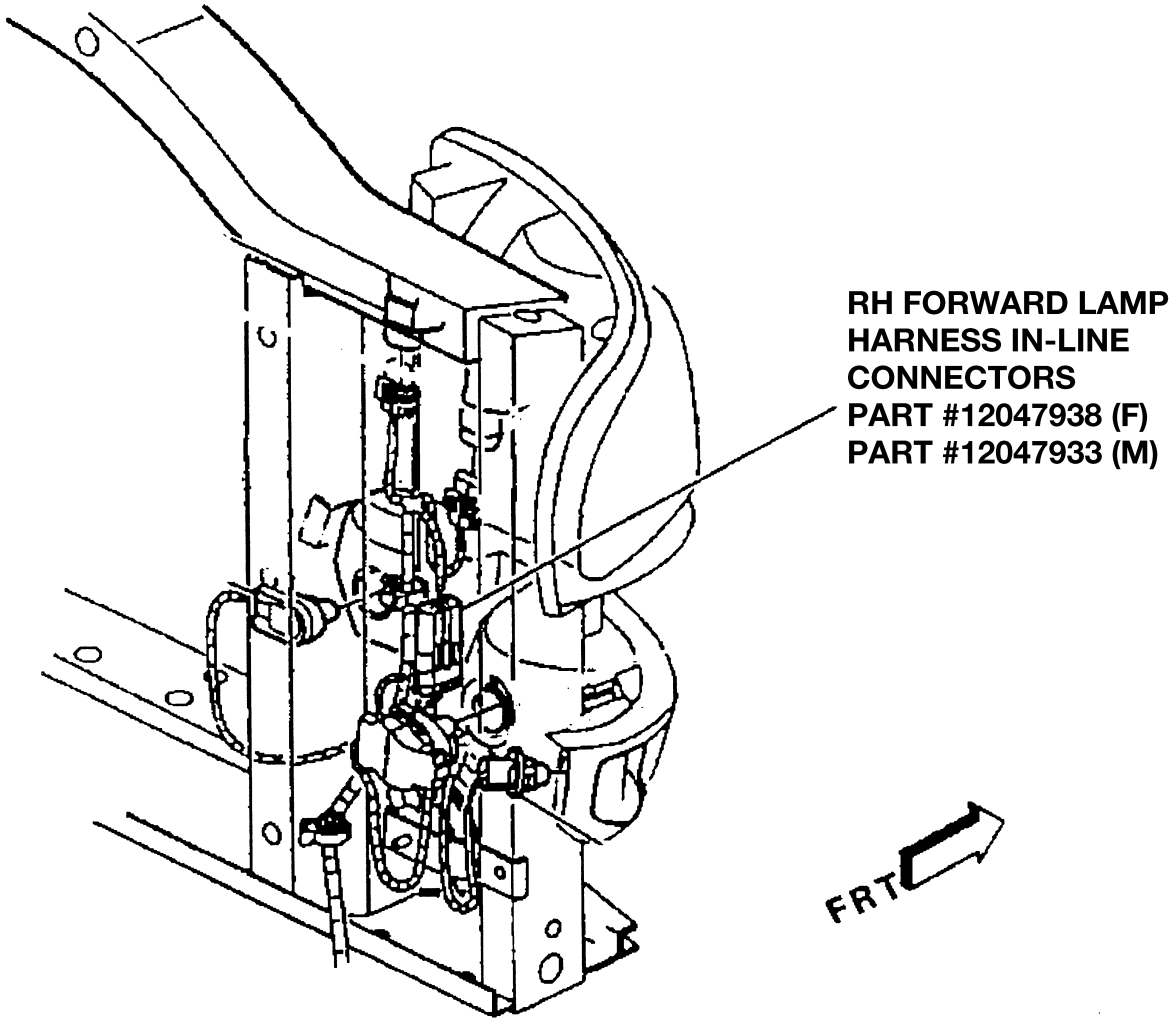
Figure 4



LH FRONT OF VEHICLE

SNOWPLOW — ONLY ON THE C/K, UTILITY AND CAB CHASSIS

Figure 5



RH FRONT OF VEHICLE

SNOWPLOW — ONLY ON THE C/K, UTILITY AND CAB CHASSIS

Front Exterior Lamp Connector Circuit Function Charts

LH Forward Lamp Harness In-Line Connectors

Cavity	Circuit	Wire Color	Function	Fuse
A	2309	BRN	Front Parklamp	10-Amp FR PARK
B	2309	BRN	Front Parklamp	10-Amp FR PARK
C	2114	LT BLU	Turn Signal – Left	In-line w/LF Side Marker
D	—	—	—	—
E	2114	LT BLU	Turn Signal – Left	10-Amp LT TURN
F	150	BLK	Pk/Turn to Gnd	—
G	545	DK BLU	DRL	10-Amp DRL
H	150	BLK	DRL to Gnd	—

RH Forward Lamp Harness In-Line Connectors

Cavity	Circuit	Wire Color	Function	Fuse
A	2309	BRN	Front Parklamp	10-Amp FR PARK
B	2309	BRN	Front Parklamp	10-Amp FR PARK
C	2115	DK BLU	Turn Signal – Right	In-line w/RT Side Marker
D	—	—	—	—
E	2115	DK BLU	Turn Signal – Right	10-Amp RT TURN
F	150	BLK	Pk/Turn to Gnd	—
G	545	DK BLU	DRL	10-Amp DRL
H	150	BLK	DRL to Gnd	—

NOTE: All fuses referenced above are located in the Underhood Electrical Center.

SNOWPLOW — ONLY ON THE C/K, UTILITY AND CAB CHASSIS

(continued on next page)

Front Exterior Lamp Connector Circuit Function Charts (continued)

LH Low Beam Connector

Cavity	Circuit	Wire Color	Function	Fuse
A	712	YEL	Left Low Beam	10-Amp #52 LO HDLP-LT
B	550	BLK	Ground	–––

RH Low Beam Connector

Cavity	Circuit	Wire Color	Function	Fuse
A	312	TAN/WHT	Right Low Beam	10-Amp #55 LO HDLP-RT
B	150	BLK	Ground	–––

LH High Beam Connector

Cavity	Circuit	Wire Color	Function	Fuse
A	711	DK GRN/WHT	Left High Beam	10-Amp #59 HI HDLP-LT
B	550	BLK	Ground	–––

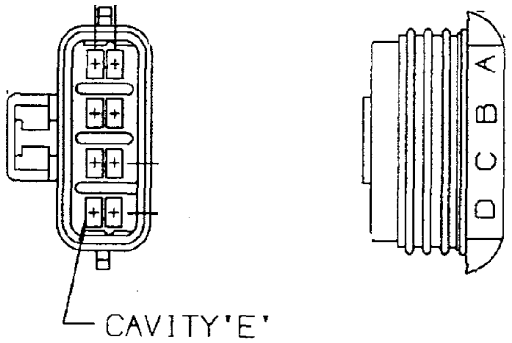
RH High Beam Connector

Cavity	Circuit	Wire Color	Function	Fuse
A	311	LT GRN/BLK	Right High Beam	10-Amp #46 HI HDLP-RT
B	150	BLK	Ground	–––

NOTE: All fuses referenced above are located in the Underhood Electrical Center.

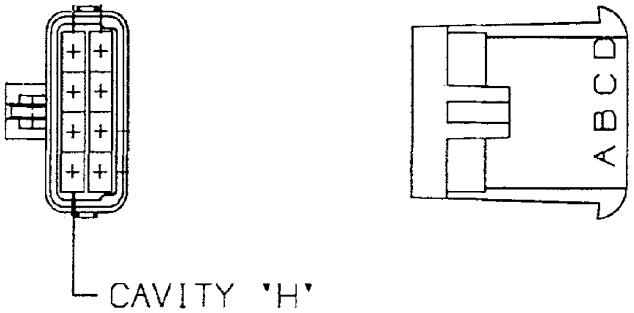
Forward Lamp Harness In-Line Connectors

FORWARD LAMP HARNESS IN-LINE CONNECTOR [F] PART # 12047938



Assembly	Components	Gender	Blocked Cavity	Notes	Color	Typical Terminal	Mating Part	Secondary Lock
1204 7938	12047934 Connector 12047939 Connector Seal	F	D	1. 12020833 CPA 2. 12048086 Cable Seal	LT GRA	12048074	12047933	12066304

FORWARD LAMP HARNESS IN-LINE CONNECTOR [M] PART # 12047933



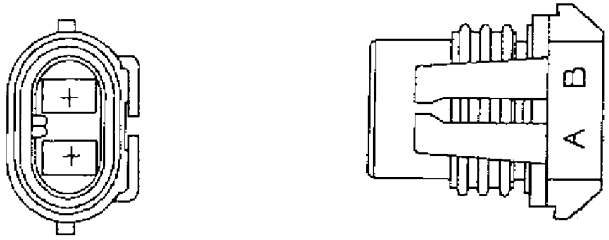
Assembly	Components	Gender	Blocked Cavity	Notes	Color	Typical Terminal	Mating Part	Secondary Lock
12047933		M	D	1. 12020833 CPA 2. 12048086 Cable Seal	GRA	12045773	12047938	12047936

SNOWPLOW — ONLY ON THE C/K, UTILITY AND CAB CHASSIS

Headlamp Connectors

LOW BEAM CONNECTOR [F] PART # 12059181

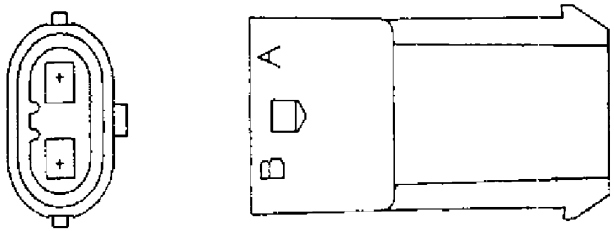
HIGH BEAM CONNECTOR [F] PART # 12059183



Assembly	Components	Gender	Notes	Color	Typical Terminal	Mating Part	Secondary Lock
12059181	12059180 Connector 12059184 Connector Seal	F	12015323 Cable Seal	MD GRA	12077411	12084166	12059185
12059183	12059182 Connector 12059184 Connector Seal	F	12015323 Cable Seal	BLK	12077411	12084167	12059185

LOW BEAM CONNECTOR [M] PART # 12084166

HIGH BEAM CONNECTOR [M] PART # 12084167



Assembly	Components	Gender	Notes	Color	Typical Terminal	Mating Part	Secondary Lock
12084166		M	12015323 Cable Seal	MD GRA	12048159	12059181	12059185
12084167		M	12015323 Cable Seal	BLK	12048159	12059183	12059185

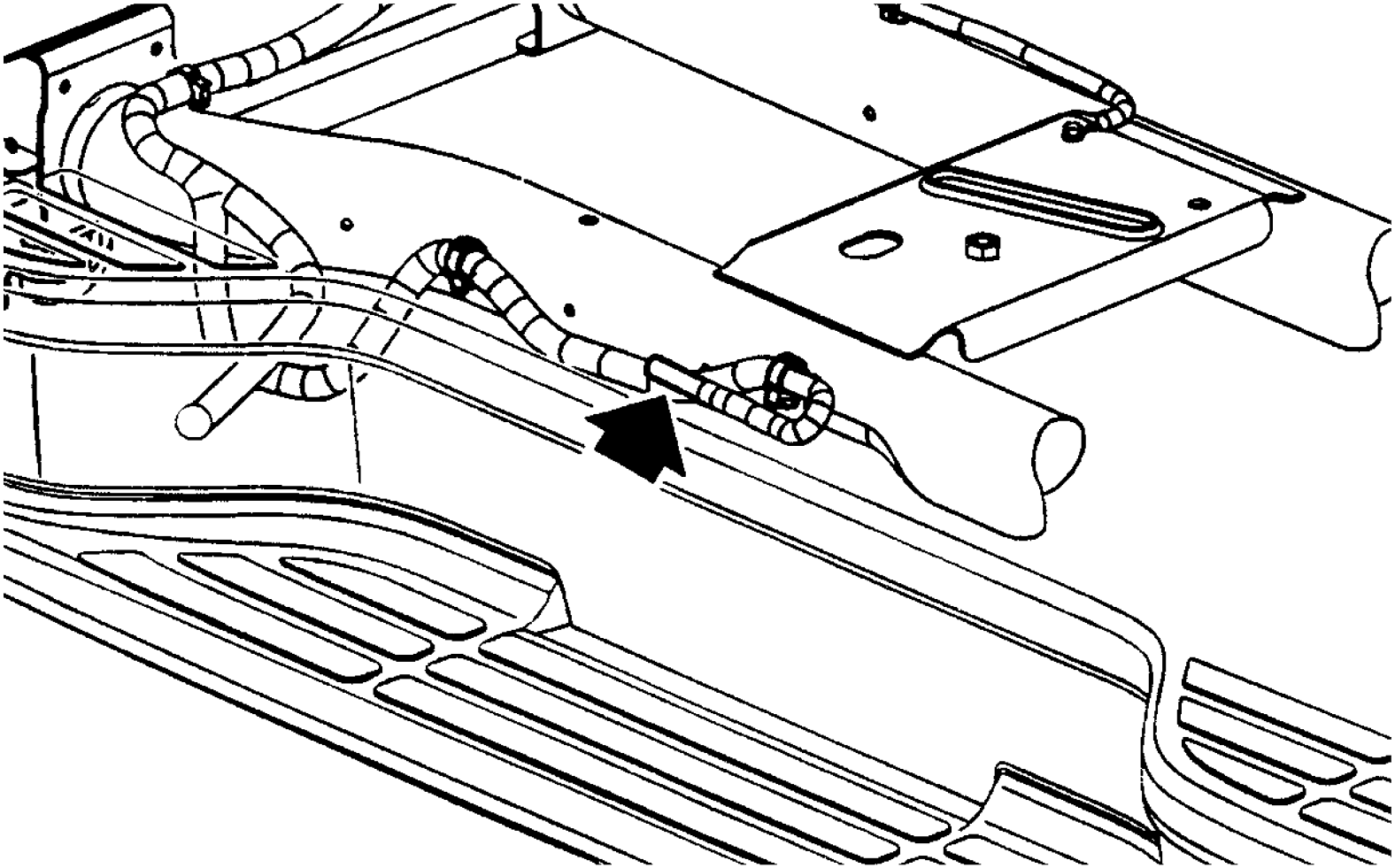
SNOWPLOW — ONLY ON THE C/K, UTILITY AND CAB CHASSIS

Front Exterior Lamp Electrical Connector Part Numbers

Part #	Connector
12047938	FORWARD LAMP IN-LINE HARNESS CONNECTOR (F)
12047933	FORWARD LAMP IN-LINE HARNESS CONNECTOR (M)
12059181	LOW BEAM CONNECTOR (F) (ON VEHICLE)
12084166	LOW BEAM CONNECTOR (M)
12059183	HIGH BEAM CONNECTOR (F) (ON VEHICLE)
12084167	HIGH BEAM CONNECTOR (M)

NOTE: Terminals and secondary locks may have to be ordered separately. Further details regarding the connectors can be obtained from the Delphi Products Handbooks or by calling 1-800-PACKARD (1-800-722-5273).

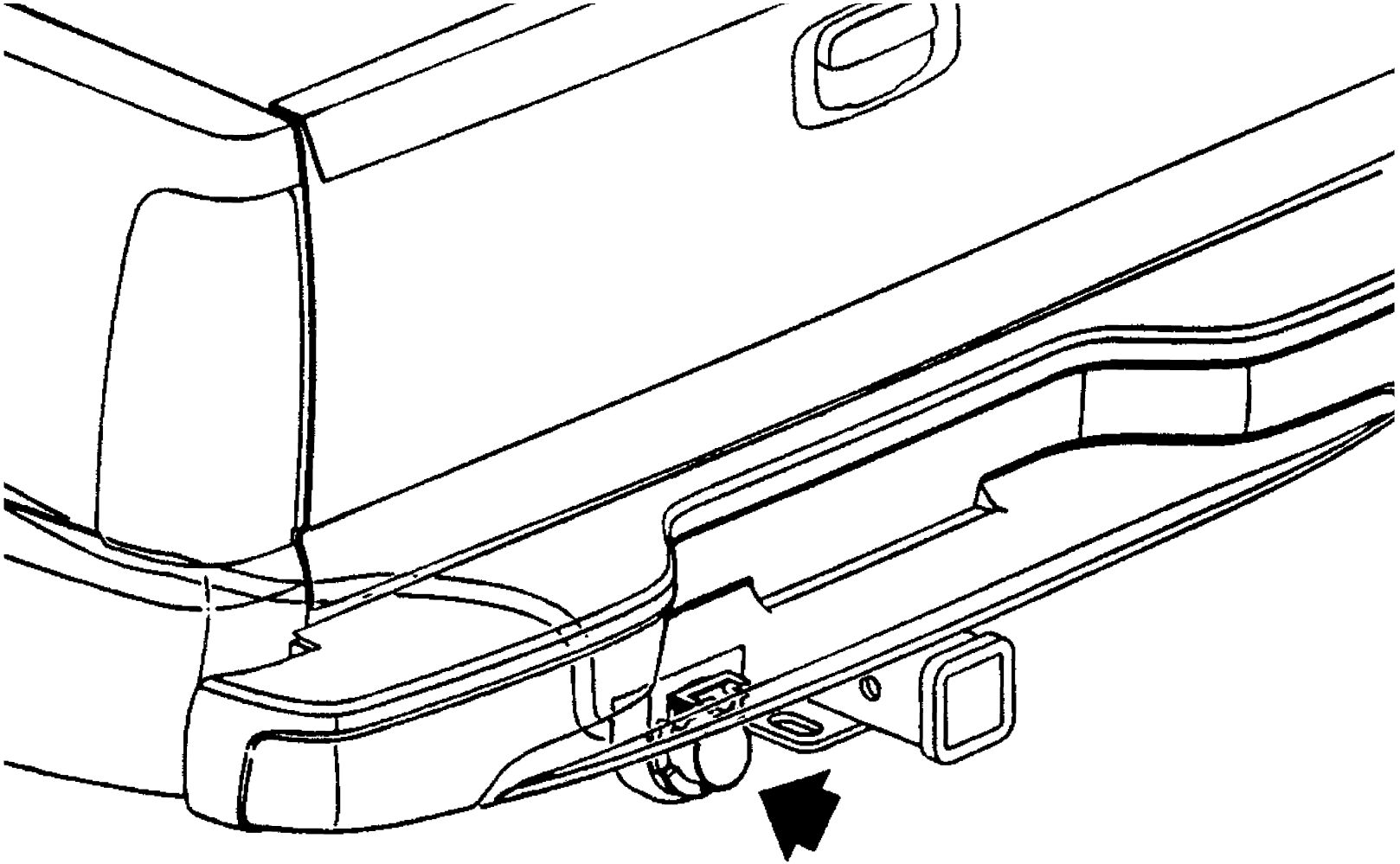
Figure 6



BASIC TRAILER WIRING PACKAGE

SNOWPLOW — ONLY ON THE C/K, UTILITY AND CAB CHASSIS

Figure 7



HEAVY DUTY TRAILER WIRING PACKAGE (IF EQUIPPED)

SNOWPLOW — ONLY ON THE C/K, UTILITY AND CAB CHASSIS